

We DEVELOP

CURE & FLOW FRONT MONITORING

Solution for injection process monitoring

CFF accelerates development and improves cost efficiency of dry fibre manufacturing processes

Benefits

Ease of use

- Portable equipment
- Intuitive result interpretation for operators
- Easy sensor handling & integration
- Automatic calibration

Line Sensors

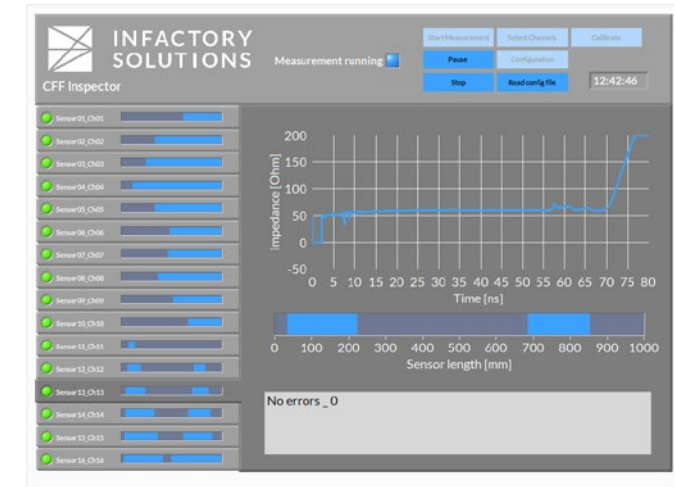
- Line sensor (1 to 10 m long) with 1 % length resolution
- Simultaneous evaluation of up to 16 sensors, overlap possible
- Evaluation of different sensor geometries with one equipment

Process Integrity

- Tool integrated solutions to reduce RCs
- Vacuum tightness ensured
- Compatible with all standard fibers and resins
- Real-time data feedback for process automation

Customisation

- Customized sensor solutions
- Possible data visualization in digital part models
- Detection of resin vitrification point possible
- On-going development for structural health monitoring



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Features

- Precise resin localisation along line sensors
- Real time monitoring
- 16 channels for parallel monitoring of resin behaviour
- Intuitive user interface and visualisation
- Portable device for process development - off-the-shelf
- Industrial process integration: custom-made solution
- For aerospace, wind energy, construction etc.
- Enabler for process automation (e.g. online control of resin flow and distribution)

Customization

- CFF instrument:
 - Fully integrated IP64 industrial solution with touch control
 - Customisable user interface upon request
- CFF sensors:
 - Modified geometry (length, diameter)
 - Mould integration (metal, GFRP)

Technical specifications

CFF instrument:

- Number of channels: 16
- Required periphery: power supply, PC

CFF cables:

- Protection: Metal shielding
- Standard length: 2.5 m
- Maximum length: 10 m

CFF connectors:

- Versions: Tool-mounted / Sealing tape integration
- Thermal stability: 190 °C
- Vacuum loss: < 10 mbar / 5 min (Aerospace standard)

CFF sensors:

- Length: 1 m
- Size: $\varnothing < 0.2$ mm
- Thermal stability: 190 °C



Materials:

composites (CFRP, GFRP, AFRP, etc.)